

ULTRA-DI

DI20

User's Manual

ENGLISH

Version 1.0 October 2002



Welcome to the BEHRINGER family!

Thank you for the confidence you have placed in us by purchasing the ULTRA-DI DI20 professional active 2-channel DI-box/splitter.

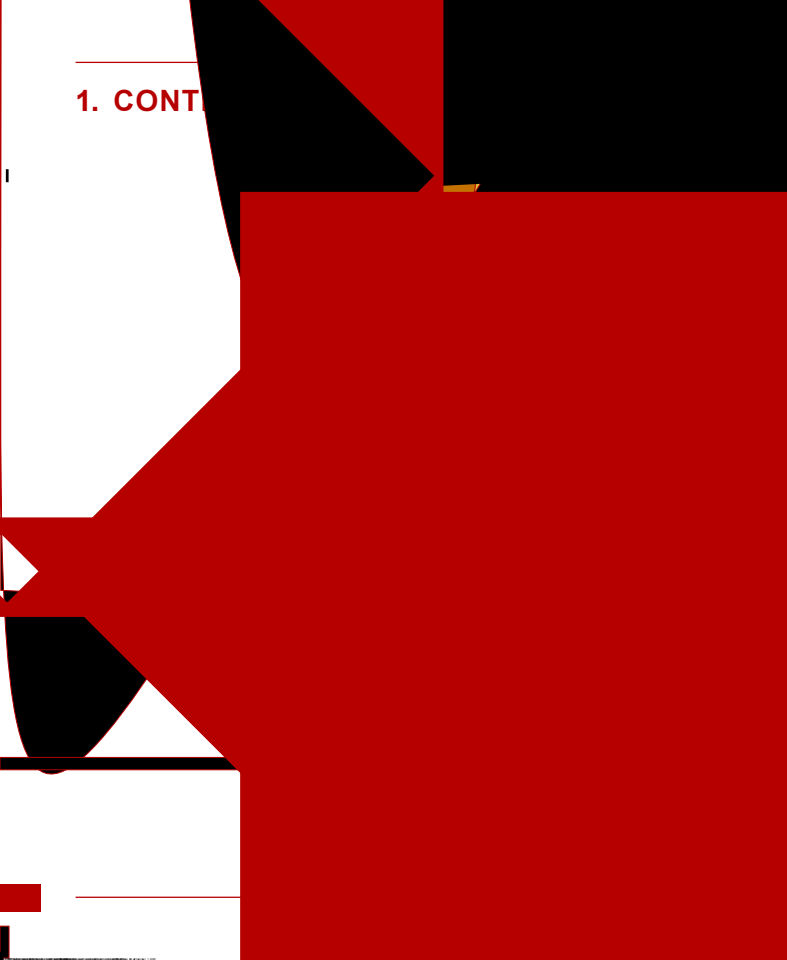
On stage as well as in studios, it is sometimes advantageous to connect certain sound sources directly to the mixing console. Since many instruments (keyboards, for example) don't have balanced outputs they require a DI-box. Sometimes, even guitars can't be directly connected to mixing consoles because their impedance is too high.

By using a DI-box, you can tap into a high-impedance, unbalanced signal—for example, a signal between a guitar and a guitar amplifier. From this point, you can feed this signal directly to a mixing console.

There are active and passive DI-boxes. A passive DI-box is more affordable, but its performance is dependent on the impedance of the device to which it is connected. When the impedance on the mixing console's end changes, so does the impedance at the input of the DI-box. Such DI-boxes only function properly when the connected impedance values are strictly specified (high at the input, low at the output). Active DI-boxes are not affected by these impedance considerations. The input impedance of the DI20 is extremely high, and it absolutely does not influence the signal flow through the DI-box. The output impedance is balanced and always very low, whereby the signal is far less prone to being affected by noise.



1. CONT





- 6 The *MODE* switch lets you select the operating modes of the DI20. In the *2-CH* mode, two independent signals can be connected to channels 1 and 2 respectively. In *LINK* mode the DI-box functions as a splitter: One signal can be fed to the channel 1 input and split into two balanced signals (at outputs 1 and 2) and an unbalanced signal at CH.1 OUT. The unbalanced signal can, for example, be connected to an additional amplifier.





guitar amp/mixing console

is the standard application of a DI-box. The
connected to a guitar amp and balanced to a mixing

This application has advantages when used
because very few microphones are able to pick
up at high levels.

Fig. 2.1: Guitar

This configuration is recommended when using a DJ-mixer or another signal source, which sends an unbalanced line level signal. In addition, if you need a separate monitor signal, the line level signal can be sent to another amplifier.

3. AUDIO CONNECTIONS

The BEHRINGER ULTRA-DI DI20 features electronically servo-balanced standard inputs and outputs. The circuit design is equipped with automatic hum suppression for balanced signals and operates problem-free even at high levels. Externally induced mains hum is thus efficiently suppressed. The servo function automatically detects unbalanced pin connections and changes the nominal level internally by 6 dB so that there is no difference in level between input and output signals.

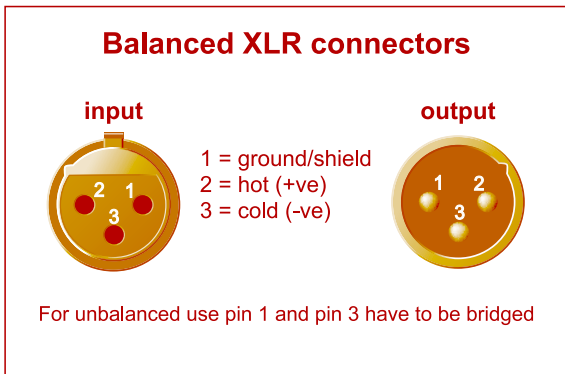


Fig. 3.1: XLR connectors

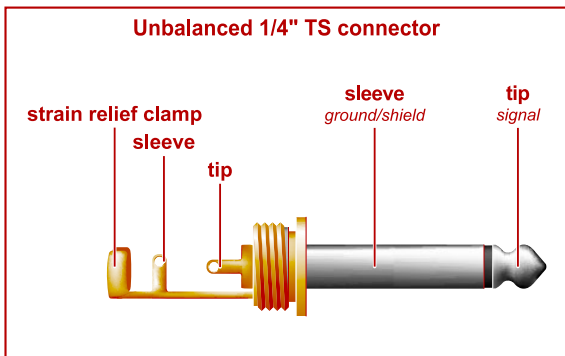


Fig. 3.2: 1/4" TS connector

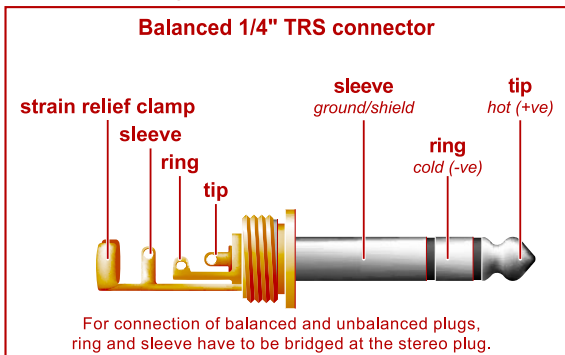


Fig. 3.3: 1/4" TRS connector

4. MULTILINGUAL DOCUMENTATION



5. SPECIFICATIONS

Frequency response	10 Hz to 70 kHz (-3 dB)
Noise	100 dBu
Distortion	< 0.014% (1 kHz, 0 dBu in)
Input resistance	> 250 k Ω
Connection impedance	> 600 Ω
Input	1/4" mono jack
Output	XLR balanced
Max. input level	+12/+32/+52 dBu
Phantom power	18 V DC to 48 V DC
Battery power	9 V 6LR91
Dimensions	6" (150 mm) x 5" (130 mm) x 2 3/8" (60 mm)
Weight	approx. 650 g

BEHRINGER is constantly striving to maintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may therefore differ from those listed or shown.

6. WARRANTY

§ 1 WARRANTY CARD/ONLINE REGISTRATION

§ 2 WARRANTY

§ 3 RETURN AUTHORIZATION NUMBER

BEFORE

§ 4 WARRANTY REGULATIONS



§ 5 WARRANTY TRANSFERABILITY

§ 6 CLAIM FOR DAMAGES

§ 7 OTHER WARRANTY RIGHTS AND NATIONAL LAW